Thank you for the opportunity to contribute our input to this important process. As a Charter Partner of the Energy Star Roof Products Program and a two time recipient of the Partner of the Year award, Roofing Products, I assure you that National Coatings sees the importance of the work that is being done on behalf of our nation in the name of Energy Star.

The only inputs I have on the level of the specifications for Reflectivity, Emissivity & Solar Reflectance is that the bar may not be set as high as it could be while still being inclusive of all major roofing products suppliers. It's been my experience that when a bar gets set higher, that American business rises to the challenge to meet those new requirements. Inclusion of the SRI seems like a great idea in that it combines the two metrics, reflectivity and emissivity into one number, but I would have expected the degradation allowed in the aged value (after 3 years) to be comparable to the reflective degradation. Whereas the decline in reflectivity for low slope is 23% over three years, the decline for SRI is 29%. With new requirements the bar is being lowered?

For steep slope the change is even more significant. The steep slope is allowed a decrease in reflectivity over three years to be a whopping 40%. Under the new SRI option, the decrease can be as much as 78%!

I would suggest that the ES team review both of these areas and see if this still makes sense to allow such large deviations from the original starting point. The value provide to the nation and consumer is obviously a very short term proposition at best with the metrics proposed.

Lastly, on the topic of testing and listing based on the intended substrate of installation (Pg 9) I am concerned about this for a number of reasons:

- 1) ASTM D6083-05 Standard Specification for Liquid Applied Acrylic Coating used in roofing specifies Aluminum panels for testing. ASTM already thought through all the issues about substrates. If you specify ASTM testing, you must stick with the proscribed methods otherwise you are introducing uncontrolled variables into these test methods.
- 2) Which Mod Bit or which BUR do you use for the testing? All manufacturers are not the same.
- 3) For the manufacturers who have coatings that go over most if not all substrates, i.e., BUR, Mod Bit, Concrete, PVC, EPDM, TPO, Silicone, Hypalon and Metal and some single coatings that go over multiple substrates, you are introducing a) an administrative nightmare, b) testing costs that could be 400-1200% or more higher than they currently are. This financial burden may take many of the smaller companies out of the Energy Star market.
- 4) It has yet to be demonstrated by independent scientific test that the difference in reflectivity by substrate makes a material difference. If there is no difference, why put this financial and administrative burden on the manufacturers that will only result in higher prices in the marketplace. The manufacturers are forced to pass these costs of doing business on to their customers.
- 5) If this is a point that Energy Star will not move off of, I would suggest that Energy Star also require the other roofing products: BUR, Mod Bit, EPDM, PVC, Metal etc to submit

samples based on their substrates to account for mechanical or non mechanical attachment to the roof (fasteners may likely provide a thermal bridge driving the demand for more energy). Additionally, the effect that insulation may or may not have. On a more positive note, we applaud the removal of the cleaning option and the ability to self test. The Energy Star program will certainly gain more credibility as a result.

Kindest regards, Matt Kolb